

## **UBPATCH (3.0.1.6GP5:4/30/97) (UBPATCH)**

### ***SEGMENT DESCRIPTION***

The UBPATCH 3.0.1.6GP5 upgrades the functionality of a GCCS 2.2 machine with UB fully loaded. It adds several new capabilities and corrects a few problems. The updated programs and data span the contents of the various UB segments (GCCS COE, JMTK, UBApps, JMCISApps, and Printer), as these are inter-related.

All future UBPATCH segments (e.g. UBPATCH 3.0.1.6GP6) will be roll-ups of all previous UBPATCH segments, and the deinstall/reinstall will happen automatically when the new UBPATCH is installed.

This segment should be loaded on any system where UB is desired and is fully loaded.

### ***INSTALLATION INSTRUCTIONS***

Step 1: Verify installation of required segments:

GCCS COE 3.0.1.6.02G  
JMTK 3.0.1.6.02G  
UB APPS 3.0.1.6.02G  
JMCIS APPS 3.0.1.6.02G  
PRINTER 3.0.1.6.02G

Step 2: Install UBPATCH 3.0.1.6GP5.

The following will be presented to the installer:

The user is told to reboot the system after installation of the UBPATCH 3.0.1.6GP5.

### ***FIXES / NEW FEATURES***

This release updates the following:

The following are fixes/new features for UBPATCH 3.0.1.6GP5:

1. Included a roll-up of all previous 3.0.1.6G patches (specifically UBPATCH, Version 3.0.1.6GP1, 3.0.1.6GP2, 3.0.1.6GP3 and 3.0.1.6GP4, see changes below).
2. Corrected potential Master Tdbm instability in the case of a client process submitting a poorly constructed track structure. Tdbm no longer terminates abnormally, even given bad data.
3. Corrected a problem with the Alert Log on HP that caused the Log to core dump and fail to appear under certain circumstances.
4. Added capability to show Mode 1, Mode 2 / PIF, or Mode 3 as symbol labels on Link tracks on the chart, and added ability to select those columns (and sort by them) in the TRACK SUMMARY windows.

5. Reworked socket connection mechanisms in MDX channel to improve stability. Corrected logic to enable auto-reconnection of the MDX channel after network failures. Improved details in Raw Window display and manually debugging output.
6. Corrected the Critical TacPlot Error and Chart crash reported in conjunction with the AutoPlot-Off feature. Also corrected a number of smaller memory leaks in TacPlot.
7. Corrected a problem with UB serial channels in handling of incoming message buffers. The last message received would hang in the buffer and would not be processed by the receiving system until another message arrived or a small period of time passed.
8. Added two MISC menu items: PREPARE FLOPPY and EJECT FLOPPY, to enable ATO imports from floppy via the ATO Log. PREPARE FLOPPY need be run only once on an HP (set up device links), but once per insertion of the floppy on Solaris (after disk is inserted).
9. Increased the maximum size of the PIF Nicknames table from 100 to 500.
10. Corrected a minor UB problem with core Ocm that could cause Ocm client lockup if certain APIs are used and an invalid request is received.

The following are roll-up fixes/new features for UBPATCH 3.0.1.6GP4:

11. Included a roll-up of all previous 3.0.1.6G patches (specifically UBPATCH, Version 3.0.1.6GP1, 3.0.1.6GP2, and 3.0.1.6GP3, see changes below).
12. Fixed a memory-offset problem in Mps that was forcing a Master Tdbm core dump when an ELINT track encoded in a Gen Broadcast was processed.
13. Corrected a failure of a track to update on the chart, even though the track position has been successfully updated, when the track symbol has been changed to a "dot".
14. Made changes to the UB Tracks program so that the JTAV Track Edit window is launched when the user edits a JTAV track. If the JTAV segment is not loaded, the standard unit Track Edit window will be displayed when a JTAV-originated track is edited.
15. Corrected a low-level library stability bug in UB that can cause core dumps of other executables when called with invalid filename data. Required for JTAV upgrades to Tracks program.
16. Made several enhancements to the Map Loader and Map Control windows: eliminated map redraw when Map Control is launched; now display width of maps currently displayed in Map Control; show previously-saved maps in "save" feature; and allow load of maps to "/".
17. Changed the maximum number of lines permitted in the processing of an ATO from 10,000 to 30,000, in support of USAF exercises.

18. Corrected a problem that prevented some channels from launching on a Tdbm Master with more than ~15 Slave Tdbm machines. Also raised maximum open files per process limit on UB server processes from 64 to 256, to support up to ~125 Slave Machines in theory.
19. Modified the UB Printer facility to enable the configuration of printers that use the Solaris BPP0 and BPP1 parallel ports.
20. Modified the printer initialization script to avoid use of the environment variable, "HOST", already set locally to the shell by the .cshrc.CCAPPS script.

The following are roll-up fixes/new features for UBPATCH 3.0.1.6GP3:

21. Included roll-up of all previous 3.0.1.6G patches (specifically, UBPATCH, Version 3.0.1.6GP1 and 3.0.1.6GP2).
22. Corrected a number of bugs with the "ATOX+" software (ATO processing). Enabled receipt of VERY long "NARR" entries, corrected MERGE problems (deleted CHANGE message, or original ATO with no CHANGEs received yet). Corrected 1st TASKUNIT failure to plot.
23. Added the capability to display link tracks by Mode-3 IFF value. The Mode-3 option is now available from the Plot Controls/Symbol Labels window.
24. Under UBs Track Status window, added capability for users to see maximum track database size by track type. These maximum values are configurable through a sysadmin option, but they can now be viewed through Track Status.
25. Corrected potential socket-related instability in QueryServer executable, which could have caused processes connecting to QueryServer to lock up if incorrect data was passed.
26. Modified Mdx datafile for MdxTrkBdcst encoder to increment number of slots field, to help protect against data loss in burst situations.
27. Rewrote Printer Setup windows using Motif window manager, so that Mixed Case is now supported in the Printer Name field. This REMOVES the restriction that all printers used by UB must be ALL CAPS.

The following are roll-up fixes/new features for UBPATCH 3.0.1.6GP2:

28. Included roll-up of all previous 3.0.1.6G patches (specifically, UBPATCH, Version 3.0.1.6GP1).
29. Increased maximum JUNIT count in Tdbm by 1150 to a total of 1650. Also included a new SysAdmin menu option to reconfigure the maximum track limit distributions by track type. NOTE: Reconfiguration requires reboot of all systems on the LAN running UB.

30. Corrected the ability of the Set View Filter application to crash System Chart if the View Window was not already launched.

The following are roll-up fixes/new features for UBPATCH 3.0.1.6GP1:

31. Enhanced the functionality of the UB ATO processing, adding features such as the ability to attach link tracks by mode-2 to targets so the ATO can be monitored as it is carried out.
32. Added LOS Profile capabilities to the system, allowing a graphic elevation profile of the line of sight between two selected points on the display (DTED map data only).
33. Added a LK11ADS (Link 11 ADSI) interface to the list of available interfaces, allowing the Link-11 Indian-Head protocol to receive real-time ADSI link track information and plot the tracks using a stereographic projection on the geodisplay.

### **KNOWN PROBLEMS**

The following are known problems for UBPATCH 3.0.1.6GP5:

1. While the ATO Import capability has been enhanced, the ATO Export capability remains inoperable at this time. There is no workaround solution for this issue.
2. Due to a difference in implementation and a related Solaris operating system limitation, the ARCHIVE-RESTORE feature will not work in conjunction with the PREPARE FLOPPY option.

The PREPARE FLOPPY and EJECT FLOPPY options are designed to be used during the ATO Import process only. Selecting PREPARE FLOPPY invokes the volume manager, creating device links from the floppy drive to the ATO Import process. The EJECT FLOPPY option releases the floppy drive device, making it available for use by other processes.

The PREPARE FLOPPY option should *only* be used as part of the ATO Import function process. *Never* use the PREPARE FLOPPY option in conjunction with an ARCHIVE-RESTORE function. Instead, use the options presented on the ARCHIVE-RESTORE window pop-up menu.

**WORKAROUND:** If the PREPARE FLOPPY option is inadvertently used during an ARCHIVE-RESTORE process, the archive/restore will fail and return an error which indicates that the device is busy. To release the floppy device for use by the archive/restore process, select the EJECT FLOPPY option. Once the floppy disk has been ejected, reinsert the floppy disk, select the ARCHIVE-RESTORE option, and use the functions available in the ARCHIVE-RESTORE window and pop-up menu to select the appropriate floppy drive, archive or restore the data, and eject the floppy disk.